

The diagram illustrates the electrical connections for the USB to UART bridge module. Key components and their connections are as follows:

- USB_B_Micro (J1):** A USB connector with pins 1 (VBUS), 2 (D-), 3 (D+), 4 (D-), 5 (Shield/GND), and 6 (GND).
- USB to UART Bridge IC (U2, FT232RL):**
 - Power:** VBUS (pin 1) is connected to VCC (pin 15) via capacitor C7 (0.1uF). GND (pin 5) is connected to GND (pin 14) via capacitor C8 (4.7uF).
 - Control:** RESET (pin 14) is connected to a 3V3OUT supply via a network of resistors (R9, R10) and capacitors (C9, C10).
 - Data:** TXD (pin 20) is connected to RX (pin 4), RXD (pin 4) is connected to TX (pin 2), RTS (pin 2) is connected to RTS (pin 9), CTS (pin 9) is connected to DTR (pin 7), DTR (pin 7) is connected to DCD (pin 8), and RI (pin 8) is connected to RI (pin 5).
 - Other Pins:** VCCIO (pin 3) is connected to 3V3OUT. CBUS0 (pin 18), CBUS1 (pin 17), CBUS2 (pin 10), and CBUS3 (pin 19) are connected to GND.
- UART Module (U1, MAX3232CPE):**
 - Power:** VCC (pin 15) is connected to 3V3OUT via capacitor C6 (0.1uF).
 - Data:** TX (pin 2) is connected to TXD (pin 4), RX (pin 4) is connected to RXD (pin 2), RTS (pin 9) is connected to RTS (pin 7), and DTR (pin 7) is connected to DCD (pin 8).
 - Other Pins:** RI (pin 8) is connected to RI (pin 5).

Diagram illustrating the connection of a 6-axis force sensor assembly. The assembly consists of six stacked modules, each labeled TOUCH1 through TOUCH6. Each module is connected to a terminal (TP1 through TP6) and a corresponding TOUCHPAD. The terminals are connected to a common ground line at the bottom.

Diagram showing the pin connections for the SDA2 module:

J3 Conn_02x03_Odd_Even:

- Pin 1: GND
- Pin 2: +3V3
- Pin 3: SCL2
- Pin 4: SDA2
- Pin 5: GND
- Pin 6: SDA2

J4 Conn_02x03_Odd_Even:

- Pin 1: GND
- Pin 2: +3V3
- Pin 3: SCL2
- Pin 4: SDA2
- Pin 5: GND
- Pin 6: SDA2

The diagram illustrates the internal circuitry of the LEDS and AUTOFLASH sections of the TMS320C49 evaluation module.

LEDS Section:

- U3 (IS31FL3236):** An 8-channel LED driver IC. Its SDA, SCL, and AD pins are connected to the I2C bus. SDB, R_EXT, and GND pins are connected to VCC, GND, and GND respectively. The OUT1-OUT8 pins drive LEDs D1-D8 (LED_RABG). OUT9-OUT16 are connected to GND. OUT17-OUT27 drive LEDs D9-D16 (LED_WHT).
- LEDs:** Eight red LEDs (D1-D8) and sixteen white LEDs (D9-D16) are connected in a common-cathode configuration. The anodes are connected to VCC through current-limiting resistors (R3, R6).
- Resistors:** R3 (100k) and R6 (3.3k) are used for current limiting.
- Capacitors:** C4 (1uF) and C5 (0.1uF) are connected to the I2C bus for decoupling.

AUTOFLASH Section:

- U5 (UMH3NFHA):** A monostable multivibrator IC. Its RTS, DTR, and I/O pins are connected to the I2C bus. The RESET pin is connected to VCC. The output pin (pin 6) is connected to the I2C bus.

U5
UMH3NFHA

RTS 1

DTR 2

100 3

4 DTR

5 RTS

6 RESET

Rev:
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